

as at this station. Lying due west is an extensive ravine about 30 miles long, reaching from the foothills to the summit of the main range of the Continental Divide. Within the confines of this great canyon are three lakes, varying in length from 1 to 3 miles in extent, the upper lake being about 1,000 feet above the lower. When a chinook is blowing, a billowy mass of vapor hangs over the upper lake like a great mass of cotton, white, unchanged in form, unvarying in shade, for hours at a time. It is a very beautiful spectacle and is known as the "white flag of the chinook."

## NEVADA.

Mr. Charles G. Fogg, of Silver Peak, Nev., reports "On the 29th, Pogonip all over the valley."

In general, the Section Director, Mr. R. F. Young, notes that an area of high pressure, clear, cold, dry air, with light winds from the north, prevailed throughout the month, with more frost than usual. These are the conditions that favor the Pogonip, which is a mist of ice crystals or frozen fog and very injurious to the health of men and animals. Some remarks on the Pogonip will be found in the MONTHLY WEATHER REVIEW for February, 1894, Vol. XXII, page 77. We should be glad to publish a special study of the Pogonip in any one of the valleys of Nevada.

## ARKANSAS.

The detailed report of the Fort Smith tornado and that of the Crawford County tornado will be found in the January report of the Arkansas Section.

## NEW ENGLAND.

A detailed account of the snowstorm and resulting damage in New England on the 25-26th and on the 31st will be found in the report of the New England Section. The blizzard of January 31-February 1 was comparable with that of March, 1888, and December, 1872, and January, 1867.

## MARYLAND.

The report of the Maryland and Delaware Section gives an account of the establishment of twenty special stations by the Maryland State Weather Service, which is now enabled to take up profitable lines of research bearing upon the physiography, climatology, hydrography, forestry, and crops of that State. The work will be done in cooperation with the United States Geological Survey and the various bureaus and divisions of the United States Department of Agriculture. The problems to be first taken in hand will be "The influence of Chesapeake Bay and of the mountains of Washington County upon the crops in their respective vicinities. Four series of three special stations each will be established, reaching from the water's edge of Chesapeake Bay inland, and the twelve stations will represent the soils devoted to garden truck, wheat, corn, and fruit. Eight or more stations will also be established in Washington County at different elevations upon the mountain slopes, representing the upper and lower limits of successful cultivation of peaches. Observations of the temperature and moisture of the soil will be made in addition to the meteorological observations."

One can but hope that important economical results will flow from this notable effort on the part of Professor Clark and the State legislature to thus extend the work of the State service from the mere field of observation over into the field of agricultural investigation. Studies of a general character in this matter of the relations between climate and crops have been taken up by isolated agricultural experiment stations, and pretty much all that was known on the subject ten years ago was collected by the Editor in his report of June 30, 1891. The present investigation by Professor Clark is undoubtedly the most extensive that has yet been undertaken by any State or Government.

## TENNESSEE.

In the report of the Tennessee section Mr. H. C. Bate, section director, states that he has on hand a number of the

earlier copies of these reports and other publications which will enable him to supply missing numbers to those who desire to complete their sets. We are sure that many students of climatology, in foreign countries as well as in the United States, will gladly avail themselves of this offer.

## SPECIAL SNOWFALL BULLETINS.

A year ago Mr. Brandenburg, director of the Colorado State section of the Climate and Crop Service, initiated a system of special reports on the snowfall, which was found very useful in forecasting the quantity of water that became available for irrigation when the snow melted. We take pleasure in noting the fact that Mr. Blythe, in charge of the Arizona section, has published a similar special snow bulletin for that State. At the close of January there was more snow than usual still remaining on the ground at many stations, while others reported that, although the snow had disappeared, yet the ground was thoroughly soaked, and the cold weather had caused the retention of an unusual quantity of water in the soil, so that, on the whole, there was a good prospect of an abundance of water for agricultural purposes.

## THE ALMANACS AND THE WEATHER BUREAU.

During the past few months the Editor has noticed a number of newspaper paragraphs discussing the relative merits of the weather predictions published daily by the officials of the Weather Bureau for one or two days in advance, and those published by the numerous "farmers' almanacs," published several months, or even a year, in advance, and sold in large numbers throughout the country. The predictions of the weather, as made by the Weather Bureau, are based entirely upon the daily maps that show the actual condition of the atmosphere, as reported by reliable observers throughout the country. On the other hand, the predictions in the various almanacs are founded upon a variety of principles among which are the following:

1. The most conservative and rational almanacs are those that compile from the records of many past years a table showing what sort of weather has prevailed most frequently on the respective days of the year.

2. The least rational almanacs are those that pretend that the weather is controlled by planetary combinations and stellar influences, therefore, such predictions are properly said to be based upon astrology.

3. An intermediate class publishes predictions based upon the probability of spots on the sun, thereby assuming it to have been demonstrated that the solar spots control terrestrial weather.

4. The least scientific system of preparing the almanac predictions was explained to the Editor many years ago by a gentleman whose almanac made the greatest pretensions to high scientific accuracy. This gentleman stated that on certain days he felt endowed with a certain ability or inspiration. These were his weather making days, on which he sat down, and with the most absolute confidence in the accuracy of his work, wrote up the weather for the coming year, continuing at the work for a considerable time until the inspiration seemed to leave him, whereupon he necessarily stopped and delayed resuming the work until again filled with the spirit of divination.

Doubtless some almanac makers adopt a combination of the four preceding methods but, in general, these seem to be the principles most widely recognized in the long-range predictions of the almanacs, except only that in all cases the authors make free use of a system of general and rather indefinite terms that will apply just as well to a thunderstorm, a hurricane, or an earthquake. The warning "look out for something very unusual about this time" is, of course, not